

WE CLAIM:

1. In a system having a client side and a server side, a method for  
5 generating an automated voice pattern filter, said method comprising:  
    comparing a set of spectral shapes to a set of spectral parameters,  
the set of spectral shapes corresponding to a speech signal on the client side,  
the set of spectral parameters corresponding to one or more keywords;  
    determining an acceptability of the speech signal in response to the  
10 comparison of the set of spectral shapes to the set of spectral parameters;  
    determining spectral information indicative of an encoded  
difference in a voice pattern between the speech signal and the one or more  
keywords when the speech signal is determined to be acceptable; and  
    generating the voice pattern filter as a function of the spectral  
15 information to thereby facilitate an optimal performance of the server side.
2. The method of claim 1, further comprising:  
    transmitting a data packet including the spectral information from  
the client side to the server side to thereby generate the voice pattern filter on  
20 the server side.

3. In a system having a client side and a server side, a method for generating an automated voice pattern filter, said method comprising:

determining a distance between a set of spectral shapes and a set of spectral parameters, the set of spectral shapes corresponding to a speech signal on the client side, the set of spectral parameters corresponding to one or more keywords;

determining spectral information indicative of an encoded difference in a voice pattern between the speech signal and the one or more keywords when the distance is less than an established threshold; and

generating the voice pattern filter as a function of the spectral information to thereby facilitate an optimal performance of the server side.

4. The method of claim 3, further comprising:

transmitting a data packet including the spectral information from the client side to the server side to thereby generate the voice pattern filter on the server side.

5. In a system having a client side and a server side, a method for operating an automated voice pattern filter, said method comprising:

determining spectral information indicative of an encoded difference in a voice pattern between a speech signal on the client side and one or more keywords;

transforming the spectral information into a continuous frequency spectrum indicative of the encoded difference in the voice pattern between the speech signal and the one or more keywords; and

operating the voice pattern filter on the basis of the continuous frequency spectrum.

6. The method of claim 5, further comprising:

transmitting a data packet including the spectral information from  
the client side to the server side to thereby transform the spectral information  
5 into the continuous frequency spectrum on the server side.

7. In a system having a client side and a server side, the system  
including a voice pattern filter, an automated speech recognition filtering device  
and an automated speech recognition platform, a method for operating system,  
10 said method comprising:

operating the voice pattern filter on a basis of a continuous  
frequency spectrum indicative of an encoded difference in a voice pattern  
between a speech signal and one or more keywords;

operating the automated speech recognition filtering device on a  
15 basis of profile based characteristics of a first signal path from the client side to  
the server side and a second signal path from the server side to the client side;  
and

filtering a speech signal sequentially through the voice pattern filter  
and the automated speech recognition filtering device to the automated speech  
20 recognition platform to thereby facilitate an optimal performance of the  
automated speech recognition platform.

8. In a system having a client side and a server side, a method comprising:

comparing a set of spectral shapes to a set of spectral parameters,

5 the set of spectral shapes corresponding to a speech signal on the client side,  
the set of spectral parameters corresponding to one or more keywords;

determining an acceptability of the speech signal in response to the  
comparison of the set of spectral shapes to the set of spectral parameters;

transmitting a data packet from the client side to the server side

10 when the speech signal is determined to be acceptable, the data packet  
including spectral information indicative of an encoded difference in a voice  
pattern between the speech signal and the one or more keywords;

transforming the spectral information into a continuous frequency  
spectrum indicative of the encoded difference in the voice pattern between the  
15 speech signal and the one or more keywords;

operating a voice pattern filter on the server side on a basis of the  
continuous frequency spectrum;

operating the automated speech recognition filtering device on the  
server side on a basis of profile based characteristics of a first signal path from  
20 the client side to the server side and a second signal path from the server side to  
the client side; and

filtering the speech signal sequentially through the voice pattern  
filter and the automated speech recognition filtering device to a automated  
speech recognition platform on the server side to thereby facilitate an optimal  
25 performance of the automated speech recognition platform.

9. A system having a client side and a server side, said system comprising:

a module,

5 wherein said module is operable to compare a set of spectral shapes to a set of spectral parameters, the set of spectral shapes corresponding to a speech signal on the client side, the set of spectral parameters corresponding to one or more keywords,

10 wherein said module is further operable to determine an acceptability of the speech signal in response to the comparison of the set of spectral shapes to the set of spectral parameters, and

15 wherein said module is further operable to determine spectral information indicative of an encoded difference in a voice pattern between the speech signal and the one or more keywords when the speech signal is determined to be acceptable; and

a voice pattern filter, said voice pattern filter generated as a function of the spectral information to thereby facilitate an optimal performance of the server side.

20 10. The system of claim 6, wherein:

said module is further operable to transmit the spectral information from the client side to the server side to thereby generate the voice pattern filter on the server side.

11. A system having a client side and a server side, said system comprising:

a module,

5 wherein said module is operable to determine a distance between a set of spectral shapes and a set of spectral parameters, the set of spectral shapes corresponding to a speech signal on the client side, the set of spectral parameters corresponding to one or more keywords, and

10 wherein said module is further operable to determine spectral information indicative of an encoded difference in a voice pattern between the speech signal and the one or more keywords when the distance is less than an established threshold; and

15 a voice pattern filter on the server side, said voice pattern filter generated as a function of the spectral information to thereby facilitate an optimal performance of the server side.

12. The system of claim 11, wherein:

20 said module is further operable to transmit the spectral information from the client side to the server side to thereby generate the voice pattern filter on the server side.

13. A system having a client side and a server side, said system comprising:

25 a module operable to determine spectral information indicative of an encoded difference in a voice pattern between a speech signal on the client side and one or more keywords; and

30 a voice pattern filter generated as a function of a transformation of the spectral information into a continuous frequency spectrum indicative of the encoded difference in the voice pattern between the speech signal and the one or more

14. The system of claim 13, wherein:

said module is further operable to transmit the spectral information from the client side to the server side to thereby generate the voice pattern filter  
5 on the server side.

15. A system having a client side and a server side, said system comprising:

a voice pattern filter operable on a basis of a continuous frequency  
10 spectrum indicative of an encoded difference in a voice pattern between a speech signal on the client side and one or more keywords;

an automated speech recognition filtering device operable on a basis of a set of profile based characteristics of a first signal path from the client side to the server side and a second signal path from the server side to the client  
15 side; and

an automated speech recognition platform,

wherein a filtering of the speech signal through said voice pattern filter and said automated speech recognition filtering device to said automated speech recognition platform facilitate a an optimal performance of the automated  
20 speech recognition platform.

16. A system having a client side and a server side, said system comprising:

a module,

wherein said module is operable to compare a set of spectral

5 shapes to a set of spectral parameters, the set of spectral shapes corresponding to a speech signal on the client side, the set of spectral parameters corresponding to one or more keywords,

wherein said module is further operable to determine an acceptability of the speech signal in response to the comparison of the set of  
10 spectral shapes to the set of spectral parameters, and

wherein said module is further operable to transmit a data packet from the client side to the server side when the speech signal is determined to be acceptable, the data packet including spectral information indicative of an encoded difference in a voice pattern between the speech signal and the one or  
15 more keywords;

a voice pattern filter operable on a basis of a transformation of the spectral information into a continuous frequency spectrum indicative of the encoded difference in the voice pattern between the speech signal and the one or more keywords;

20 an automated speech recognition filtering device operable on a basis of a set of profile based characteristics of a first signal path from the client side to the server side and a second signal path from the server side to the client side; and

an automated speech recognition platform,

25 wherein a filtering of the speech signal through said voice pattern filter and said automated speech recognition filtering device to said automated speech recognition platform facilitate a an optimal performance of the automated speech recognition platform.

30 17. The system of claim 16, further comprising:

a transceiver on the client side containing said module.